



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-0926; Project Identifier MCAI-2022-01583-A; Amendment 39-22462; AD 2023-12-04]

RIN 2120-AA64

Airworthiness Directives; Pilatus Aircraft Ltd. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Pilatus Aircraft Ltd. (Pilatus) Model PC-24 airplanes. This AD was prompted by a report that an incorrect wiring arrangement was detected around the weather radar system. This AD requires modifying the weather radar redundant wiring, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference (IBR). The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No.FAA-2023-0926; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For EASA service information that is incorporated by reference in this final rule, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; website: easa.europa.eu. You may find this service information on the EASA website at ad.easa.europa.eu.

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. The EASA service information is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-0926.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (816) 329-4059; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain serial-numbered Pilatus Model PC-24 airplanes. The NPRM published in the *Federal Register* on April 14, 2023 (88 FR

22928). The NPRM was prompted by EASA AD 2022-0249, dated December 14, 2022 (EASA AD 2022-0249) (referred to after this as the MCAI). The MCAI states an occurrence was reported where an incorrect wiring arrangement was detected around the weather radar system on certain Pilatus Model PC-24 airplanes. In case of a lightning strike, the functionalities related to the Advanced Graphic Module (AGM) 1 and AGM2, the Dual Generic Input/Output (DGI0) 1 card in the Modular Avionics Unit (MAU) 1 module of the Honeywell Advanced Cockpit Environment (ACE) system, and the Attitude Heading Reference System (AHRS) 2 could be affected. The MCAI specifies modification of the weather radar redundant wiring.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-0926.

In the NPRM, the FAA proposed to require modifying the weather radar redundant wiring. The FAA is issuing this AD to address an incorrect wiring arrangement around the weather radar system. The unsafe condition, if not addressed, could, in the case of a lightning strike, lead to the partial loss of flight and navigation data displayed to the pilot or pilots, possibly resulting in increased flight crew workload and a consequent reduction of safety margins.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data

and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

EASA AD 2022-0249 requires modification of the weather radar redundant wiring.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Costs of Compliance

The FAA estimates that this AD affects 12 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Modification	16 work-hours x \$85 per hour = \$1,360	\$5,000	\$6,360	\$76,320

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2023-12-04 Pilatus Aircraft Ltd.: Amendment 39-22462; Docket No. FAA-2023-0926; Project Identifier MCAI-2022-01583-A.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Pilatus Aircraft Ltd. Model PC-24 airplanes, serial numbers 231 through 252 inclusive and serial numbers 254 and 255, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Codes 3497, Navigation System Wiring; and 3442, Weather Radar System.

(e) Unsafe Condition

This AD was prompted by a report that an incorrect wiring arrangement was detected around the weather radar system. The FAA is issuing this AD to address an incorrect wiring arrangement around the weather radar system. The unsafe condition, if not addressed, could, in the case of a lightning strike, lead to the partial loss of flight and navigation data displayed to the pilot or pilots, possibly resulting in increased flight crew workload and a consequent reduction of safety margins.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2022-0249, dated December 14, 2022 (EASA AD 2022-0249).

(h) Exceptions to EASA AD 2022-0249

(1) Where EASA AD 2022-0249 requires compliance from its effective date, this AD requires using the effective date of this AD.

(2) Where the service information referenced in paragraph (1) of EASA AD 2022-0249 specifies removing and discarding parts, this AD requires removing those parts from service.

(3) This AD does not adopt the “Remarks” paragraph of EASA AD 2022-0249.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2022-0249 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Alternative Methods of Compliance (AMOCs)

The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in § 39.19. In accordance with § 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, mail it to the address identified in paragraph (k) of this AD or email to: 9-AVS-AIR-730-AMOC@faa.gov. If mailing information, also submit information by email. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Additional Information

For more information about this AD, contact Doug Rudolph, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (816) 329-4059; email: doug.rudolph@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) European Union Aviation Safety Agency AD 2022-0249, dated December 14, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0249, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; website: easa.europa.eu. You may find this EASA AD on the EASA website at ad.easa.europa.eu.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on June 12, 2023.

Ross Landes, Deputy Director for Regulatory Operations,

Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-14010 Filed: 6/30/2023 8:45 am; Publication Date: 7/3/2023]